# HEALTHY MOTHER / HEALTHY CHILD (263-0242)

PROJECT PAPER

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#### LIST OF ACRONYMS

ARI : Acute Respiratory Infection

CAPMAS : Central Agency for Public Mobilization and Statistics

CCO : Curative Care Organization

CDAs : Community Development Agencies

CDC : Centers for Disease Control CDD : Control for Diarrheal Diseases

CEOSS : Coptic Evangelical Organization for Social Services

CGC : Credit Guarantee Corporation
CIH : Community Involvement in Health

CMR : Child Mortality Rate

CRHP : Cost Recovery for Health Project
CSI : Clinic Service Improvement
CSP : Child Survival Project

CSPM : Center for Social and Preventive Medicine

DH : District Hospital
DHO : District Health Officer

DHS : Demographic and Health Survey
DPT : Diphtheria, Pertussis, Tetanus vaccine

DTU : Diarrheal Diseases Training Unit

EDHS : Egyptian Demographic and Health Survey

ENGO : Egyptian non-governmental organization

EPI : Expanded Program of Immunization FAO : Food and Agriculture Organization FETP : Field Epidemiology Training Program

FP : Family Planning FY : Fiscal Year

GOE : Government of Egypt
GPs : General Practitioners

HDI : Human Development Index

HE : Health Education

HIO : Health Insurance Organization HIS : Health Information Systems

HMIS : Health Management Information Systems

HM/HC : Healthy Mother/Healthy Child HNA : Health Needs Assessment

IEC : Information, Education and Communication

IDD : Iodine Deficiency Disorders

IMR : Infant Mortality Rate

KAP : Knowledge, Attitude and Practice

LOP : Life of Project

MCH : Maternal and Child Health

MIS : Management Information Systems

MMR : Maternal Mortality Ratio

MOH : Ministry of Health
MOI : Ministry of Information

NCDDP : National Control of Diarrheal Diseases Project

NGO : Non-Governmental Organization

NMMS : National Maternal Mortality Study

OB/GYN : Obstetrics and Gynecology

OMNI : Opportunities for Micronutrient Interventions

ORS : Oral Rehydration Solution

PAPCHILD : Pan Arab Project for Mothers and Children PASA : Participating Agency Service Agreement

PEM : Protein Energy Malnutrition

PHC : Primary Health Care

PID : Project Identification Document

PP : Project Paper

PVO : Private Voluntary Organization RCH : Reproductive and Child Health RCT : Regional Center for Training

RR : Relative Risk

SIS : State Information Service

SMIP : Student Medical Insurance Program

TA : Technical Assistance

TBA : Traditional Birth Attendant
TNA : Training Needs Assessment

TOT : Training of Trainers
UN : United Nations

UNICEF : United Nations Children's Funds

USAID : United States Agency for International Development

WHO : World Health Organization

#### HEALTHY MOTHER/HEALTHY CHILD PROJECT: EXECUTIVE SUMMARY

Despite significant gains in maternal and child health made in Egypt over the past ten years of USAID support, important health problems persist, especially in Upper Egypt. In fact, rates of infant and child mortality are twice as high in rural Upper Egypt as in urban Governorates. National immunization coverage is high (88 percent of all children have received at least one vaccination while 67 percent are fully vaccinated) but is substantially lower in Upper Egypt. The national maternal mortality ratio is estimated at 174 per 100,000 live births, but averages 217 in Upper Egypt. Only 53 percent of pregnant women receive any antenatal care, while a smaller 22.5 percent receive the recommended four or more visits. Contraceptive prevalence is 47 percent nationally, but as low as 23 percent in rural Upper Egypt, resulting in more highest-risk births. Diarrhea and acute respiratory infections still cause too many child deaths.

Project **results** at the goal level will be reduced mortality: in the targetted districts, infant mortality will be reduced by 20 percent, neonatal mortality by 15 percent, child mortality by 15 percent and maternal mortality by 40 percent. Achievement of the **project purpose**, "to improve the quality, effectiveness and use of reproductive and child health services in public and private health facilities and households, with emphasis on high-risk regions," will be measured by, inter alia: the elimination of neonatal tetanus and the eradication of poliomyelitis; increased use of prenatal care; increases in correctly handled obstetrical emergencies; and increased immediate and exclusive breastfeeding in targetted districts.

The most important constraint to improved health care status of mothers and children are: the lack of adequate reproductive and child health services and information for mothers and children in the more remote areas of Egypt; government investments that are insufficient to provide incentives to personnel and guarantee quality of services, especially in rural areas; weak referral systems among different levels and types of public and private health care facilities; a surfeit of medical school graduates with poor clinical preparation and a shortage of clinically trained nurses and midwives; and the uneven quality of health services provided by the expanding private sector.

To address these constraints, USAID's Healthy Mother/Healthy Child (HM/HC) Project will direct its investments to the **district** level in selected governorates of Upper Egypt. Reproductive and child health services will be provided in **integrated** packages, resources at the **community** level will be mobilized to develop individualized action plans, and resources will be targetted to the **highest-risk regions of Upper Egypt**. District health personnel, public and private, will be empowered to develop, budget, and implement plans that will ensure that all households have access to a minimum package of essential health services. This integrated package will include quality reproductive and child health care services, community mobilization for health, and a monitoring and management system. UNICEF, a PVO Umbrella and a technical assistance contractor will work with the Ministry of Health at the district, governorate, and central levels to implement the HM/HC district strategy.

The project will thus increase the capacities and effectiveness of: (1) households, especially mothers, as first line health care providers for themselves and their children; (2) public and private providers, physicians (including all relevant specialists), nurses, nurse midwives, pharmacists, and dayas; and (3)

communities to assess their needs and mobilize resources for both long-term planning and short-term emergencies.

The district strategy will be complemented and reinforced by key long-term **national** interventions to support community efforts. Assistance through the central level of the Ministry of Health will develop national standards and improve supervision for the "essential HM/HC package;" streamline the routine reporting systems of health facilities; support further cost recovery policies; and consolidate accomplishments of the Child Survival Project. The Ministry of Information's State Information Service will develop mass media campaigns for reproductive and child health messages and reinforce these with person-to-person counseling. The project identifies additional important priorities as: supporting medical schools to strengthen relevant academic curricula and clinical training so as to improve the skills of reproductive and child health care providers and increase the numbers of female practitioners; and the strengthening of Egyptian non-governmental organizations in support of project objectives.

The USAID contribution to the HM/HC Project is \$ million over a six year life of project; the GOE contribution toward the project will be LE (approximately \$ million).

The HM/HC project proposes an innovative approach for both USAID and the Ministry of Health and will require a high degree of flexibility to adapt strategies as lessons are learned. It will also require balancing objectives of community empowerment with the achievement of quantitative results in mortality reduction. The following paper presents the current vision of how the project will unfold, but assumes this vision is destined to change over time.

## I. STATEMENT OF PROBLEM, OPPORTUNITY, AND EXPECTED RESULTS

#### A. STATEMENT OF PROBLEM

Despite significant gains in maternal and child health in Egypt over the past ten years, important health problems persist. Moreover, according to every indicator, progress has been slowest in Upper Egypt, especially in rural Upper Egypt.

Although the **maternal mortality** ratio (MMR) has most probably been declining over the last decades, it is still high -- estimated by the National Maternal Mortality Survey (NMMS) in 1992 at 174 per 100,000 live births. The MMR is 217 for Upper Egypt, and within that region, the MMR is 544 in the Governorate of Assiut and 386 in Qena.

According to the World Health Organization, the five main causes of maternal mortality are hemorrhage, sepsis (infection), hypertensive disorders, abortion and obstructed labor; in Egypt, the most important according to the NMMS were hemorrhage and hypertensive disorders. The technology to prevent all five of these causes exists. Proper antenatal care, educating women, their communities and health care providers about when, where and how to seek skilled assistance if complications arise before, during or after delivery, and family planning information and services allowing women to space pregnancies all help to reduce maternal mortality.

Over 92 percent of the maternal deaths reviewed by the NMMS were considered to have been associated with at least one avoidable factor. About 60 percent of maternal deaths occur in medical facilities, indicating that a majority of mothers do seek help with complicated deliveries; however, they seek help too late and the care they receive is too often inadequate.<sup>2</sup>

Only 53 percent of pregnant women in Egypt receive any antenatal care from trained medical providers, while a smaller 22.5 percent have the recommended four or more visits, according to the 1992 Egyptian Demographic and Health Survey (EDHS 92). According to the NMMS, local advisory groups estimated that almost one half of the maternal deaths reviewed could have been detected through proper antenatal care.

In 1992, 61 percent of births to mothers in Egypt were high risk (EDHS 92). A high risk of death for mothers and children exists under the following conditions:

According to the World Bank, the average for industrialized countries (1988) was 26 per 100,000 live births.

Among 718 cases reviewed, these avoidable factors occurred with the following frequency: 47% received substandard care from the obstetrical team; 42% delayed seeking medical care; 33% received no or poor quality antenatal care. Source: NMMS: Egypt, 1992-1993, Findings and Conclusions. Ministry of Health and Child Survival Project, July 1994, pp. 25-33.

- . births to mothers under age 20 or over age 35;
- . births of order 5 and above;
- . birth interval of under 2 years;

These risks are more frequently associated with limited maternal education and rural residence, especially in Upper Egypt.

Contraceptive prevalence rates (CPR) increased from 24 to 47 percent between 1980 and 1992, contributing to a reduction in total fertility rates from 5.2 births per woman to 3.9 in the same time period. However, there is still about 20 percent unmet contraceptive need, and in rural Upper Egypt the CPR is only 23 percent.

A hidden "iceberg" of **reproductive morbidity** seriously affects the health and fertility of Egyptian women and poses grave risks to healthy childbearing<sup>3</sup>. The consequences of these illness include fetal losses, premature birth, low birth weight and high neonatal mortality. Uncontrolled fertility, poor maternity care, poor personal hygienic practices, poor nutrition, anemia and hypertension all contribute to these reproductive illnesses; yet again, all are treatable.

Mortality of children under five has declined from about 230 to 85 per 1,000 live births between the late 1960s and the early 1990s (EDHS 92). This decline has been particularly important among children aged one to four; their mortality fell from about 110 to 25 per 1,000. Infant mortality is now at 62 deaths per 1,000 births.<sup>4</sup> The impressive immunization coverage achieved has certainly contributed to this decline: nationally 67 percent of all children are fully vaccinated. While post-neonatal mortality declined steadily during the past 25 years (from 85.4 to 26.7 per 1,000 births), neonatal mortality, or death within the first month of life, appears to have declined very little — a trend observed in most developing countries. Consequently, neonatal deaths now comprise more than 50 percent of all infant deaths.

Infant and child mortality rates are twice as high in rural Upper Egypt (119 and 164, respectively) as in urban Governorates (55 and 68, respectively), and are more than three times higher among mothers with no education (98 and 133) as among those who have completed secondary or a higher level of

<sup>(</sup>Younis,N.; Khattab,H.; Zurayk,H.; El-Mouelhy,M., 1993. "A community study of gynecological and related morbidities in rural Egypt." <u>Studies in Family Planning</u>, Vol.24, No.3,pp.175-186.) This study, known as the Giza Morbidity Study, suggested than poor women in Egypt carry a very heavy disease burden which they tend to bear with "silent endurance."

This figure is from the EDHS. According to **MOH/CAPMAS data** on reported births and deaths, infant (age 0-11 months) mortality rates were **34 per 1000** in 1991. However, since these data reflect significant underreporting, they must be used with caution. (See the discussion in the technical annex, pp 4-5.) The main body of this paper will cite primarily DHS data.

education (36 and 42). Full immunization coverage is only 52 percent in rural Upper Egypt. (EDHS 92)

The **causes** of maternal and neonatal mortality are overlapping and interrelated. The direct causes of neonatal mortality include asphyxia, sepsis, tetanus, hypothermia, pneumonia, hyperbilirubinemia, birth trauma and prematurity. Indirect causes include, inter alia, women's failure to seek and receive antenatal care including, most crucially, tetanus toxoid vaccinations (only 41 percent of mothers surveyed in the 1992 EDHS had received the recommended two or more doses); mothers' poor health and nutritional status, especially the high levels of anemia; inadequate diagnostic, referral and transportation systems and practices for the handling of obstetrical emergencies; poor neonatal care; and various deleterious traditional beliefs.

Mothers, in their role as caretakers, often do not know how to minimize their children's risks of ill-health. Only 25 percent of neonates are breastfed within one hour of birth, a crucial time as it reduces the risks of hemorrhage for the mother and infection and hypothermia for the neonate. Almost half of all mothers supplement breast milk for infants less than four months old (EDHS 92), a period when the healthiest practice is full breastfeeding. Diarrheal illnesses and acute respiratory infections (ARI) remain the major killers of children under five; childhood injuries, are suspected to be responsible for much of the balance of deaths among children ages 1-4.

The reproductive and child health picture described above exists despite an extensive network of primary health care centers, as well as a vast complex of secondary and tertiary care facilities and a good supply of physicians. Government investments in health, however, have been too low to allow the government to provide high quality health care to all citizens.<sup>5</sup> Expenditures are especially low for primary health care. As a result, facilities are poorly equipped, supplied and maintained, and incentives for personnel are inadequate, especially in the more remote areas. The health system also suffers from weaknesses in medical, nursing and pharmacology school curricula and training programs. A surfeit of medical students graduate each year but are ill prepared to provide clinical care. Meanwhile, there is a shortage of nurses and nurse midwives, who would be the providers of choice. The resulting low quality of health care is most severe in Upper Egypt, where the fewest resources flow.

As a further consequence, even in the more disadvantaged rural areas, women increasingly seek care from private providers. Yet the technical competence of these "private physicians," who almost universally also serve as Ministry of Health employees, is not substantially greater and indeed is

As an indicative figure, the MOH budget per capita was about \$5 per capita in 1992/3 (Louise Kemprecos, "Health Care Financing in Egypt," CRHP document, October 1993). The World Bank's 1993 World Development Report, "Investing in Health," estimated that \$12 is the per capita cost of providing an essential package of public health and clinical interventions in low income countries (per capita income \$350).

sometimes less than when they wear their "public physician" hat. This poor treatment is often exacerbated by the demands of uninformed or misinformed clients.<sup>6</sup>

#### B. THE OPPORTUNITY

While the challenges are considerable, the existing health infrastructure and the accomplishments to date provide a solid foundation for further advances in reproductive and child health in Egypt. Nevertheless, some important changes in strategy will be made.

First, the successes achieved elsewhere must be brought to the **highest risk regions** of rural Upper Egypt. Second, as significant investments have already been made at the central level, more resources must now be focused on the **local communities**, where the needs are greatest. Third, the impact of effective vertical interventions must now be increased through their **integration** into a comprehensive health care package.

HM/HC will be a 6-year, \$ million project. The goal is to reduce maternal, neonatal and child mortality. The **project purpose** will be:

to improve the quality, effectiveness and use of reproductive and child health services in public/private health facilities and households, with emphasis on high-risk regions.

To do so, the project will catalyze the consolidation and provision in targetted districts of an "essential minimum package" of reproductive and child health services that are feasible to Egypt's health care system. This "HM/HC package" will be based upon internationally-recognized, cost effective models which have demonstrated ability to address all the indirect and direct causes of maternal, neonatal and infant mortality. Three components will be institutionalized at the district level: clinical services, community services, and management systems. The full package includes six of the key cost effective interventions cited by the World Bank as elements of the public health and essential clinical services that can reduce the burden of disease in low-income countries by over 30 percent: EPI, school health, other public health programs (health and nutrition information), management of the sick child, prenatal and delivery care, and family planning. 8

See, for example, Langsten, R.; Hill, K., 1994. "The effect of physician training on treatment of respiratory infections: evidence from rural Egypt." <u>Health Transition Review</u>, Vol. 4, pp. 167-182.

See, for example, the World Bank's public health/clinical services package, set forth in the <u>1993 World Development Report</u>, and the World Health Organization's <u>Mother-Baby Package: A Safe Motherhood Planning Guide</u>, prepared in consultation with UNICEF, UNFPA, UNDP, the World Bank, NGOs and others.

The lion's share of project resources will thus be directed to the **district** rather than the central level. The project will mobilize district-level communities to take ownership of the health care systems within their jurisdictions, reorganize them, and thereby improve their quality and ensure that each component health unit delivers the minimum "HM/HC package." It will allow each district to tailor a strategy to meet its own unique set of needs and challenges. It will bring the most underprivileged communities of Egypt vital missing information and services through improved organization, outreach, educational campaigns, ENGO activities and mass media. It will thus empower household members, particularly women, with information and involvement, to make them active, successful providers and better consumers of care. The implementation strategy will also promote a closer partnership between public and private providers, and between all care givers and the households they serve. This approach should therefore help create a new ethos about health care in these communities.

National level interventions will provide necessary support to district activities and also address longer-term weaknesses in the Egyptian health care system. In collaboration with the MOH, the project will develop national standards and protocols for the HM/HC essential package, and identify and encourage further cost recovery policies that will increase sustainability of district-level activities. A streamlining of the data collection and reporting systems for health facilities will make these systems more useful for both MOH and HM/HC project planning and impact monitoring, and will lead to improved quality of health services. Quality will, in turn, lead to improved client satisfaction, and higher public utilization of the health care services.

Additional national-level interventions will include working with the Medical Sector of the Supreme Council of Universities to augment the relevant curricula and clinical training offered by medical, nursing and pharmcology schools, and thereby improve the knowledge and skills of health care providers. Through these schools and the promotion of credit programs, the project will seek to increase the supply of female physicians, nurses and midwives, the caregivers of choice in this health sector. In collaboration with the Ministry of Information's State Information Service, it will develop mass media HM/HC campaigns and reinforce these messages person-to-person at the district level. And through a PVO Umbrella it will strengthen the capacity of Egyptian NGOs to support the HM/HC district strategy and provide complementary health and community services.

## C. DEFINITION OF SUCCESS: RESULTS AND LINKAGES

The HM/HC project will pursue an experimental approach: success will be defined by the achievement of both health care and community strengthening objectives. The HM/HC package will provide interventions to reduce maternal, neonatal and child mortality, while the district-level strategy will ensure that each community addresses its own most serious deficiencies in offering this package.

#### 1. What will be Achieved

The project is currently designed to support each targetted district for four years; however, the results are defined for the end of the six-year project. The **goal** level objectives for the targetted districts are:

- ! 20% decrease in infant mortality rate
- ! 15% decrease in neonatal mortality rate
- ! 15% decrease in child mortality rate
- ! 40% decrease in maternal mortality rate

The goal level objectives for the national level are slightly lower than those for the target districts:

- ! 15% decrease in infant mortality rate
- ! 10% decrease in child mortality rate
- ! 20% decrease in maternal mortality rate

The **purpose** level objectives for the targetted districts are:

- ! 70% women receive 4+ prenatal visits
- ! [reduction of obstetrical emergency]
- ! 80% women giving birth attend 40th day visit
- ! Elimination of neonatal tetanus
- ! Eradication of polio
- ! 85% children under one with DTP3 immunization
- ! 90% women breastfeed within one hour of birth
- ! 75% women breastfeed exclusively for four months

In addition, five major process **outcomes** or outputs are intended, which, necessarily, will be measured qualitatively. By the end of the project:

- 1. All HM/HC supported districts will become capable of planning, monitoring, budgeting, organizing and delivering, and partially financing their own integrated, quality reproductive and child health services. Health units at these districts should all be providing the essential HM/HC package and community health education programs.
- 2. Household members, particularly women, in the HM/HC districts will have increased ability to provide and seek appropriate health care for themselves and their children through social mobilization and the reforms they bring about.
- 3. The MOH will have enhanced capacity nationally to set standards, policy, and management systems for health services. It will have consolidated its health information system (HIS) so that data essential for monitoring and management are collected, while reporting burdens on service

delivery units are minimized. Planning and budgeting at the Governorate level will also be strengthened.

- 4. Medical and nursing school graduates will have improved skills and knowledge for delivering the HM/HC package through the strengthening of curricula and training programs at all undergraduate health professional schools and the programs of a national breastfeeding training center.
- National mass media campaigns have increased popular awareness of and demand for essential reproductive and child health services. The HM/HC IEC unit of SIS is developing and disseminating HM/HC messages.

While the quantitative reductions in maternal, neonatal and child mortality are the ultimate priorities of the project, these may be achieved more unevenly than they would be through a more traditional top-down approach. USAID will therefore need to be flexible in measuring results. The implementation team will also have to make active, continuous use of lessons learned along the way to refine the strategy and respond to changing conditions.

#### 2. How these will be Achieved

The project will reduce **maternal mortality** by reducing the frequency at which obstetrical complications become obstetrical emergencies. It will increase access to and use of antenatal care; reduce births that are too early, too late and too shortly spaced; educate and train doctors, nurses and dayas to recognize danger signs and refer or handle unforeseen difficulties correctly. It will help districts organize themselves to meet emergencies with transportation and blood when needed. It will strengthen outreach to bring essential services to women in remote or very traditional regions. It will strengthen the counseling systems of health workers and volunteers to educate and inform mothers of basic concepts of nutrition, sanitation and the other essential preventive measures that will improve their overall health and their resistance to the toll of childbirth, as well as the health of their children.

The project will reduce **infant and child mortality** by: ensuring women receive proper antenatal care; promoting immediate and exclusive breastfeeding; teaching health care providers and mothers proper neonatal care (including how to provide a warm environment, resuscitation of asphyxiating infants with simple procedures and equipment, and the signs and treatment of newborn illnesses); teaching mothers and providers sick child case management (especially diarrheal disease and acute respiratory illness) and when and where to seek help from a higher level of the health care system; strengthening health education programs; and improving delivery of vaccinations to the underserved regions of Egypt.

#### D. MEASURING RESULTS

The project will measure results at both the goal, purpose and output levels, and will measure progress in the target districts and nationally. While results at all levels will be reported annually, because of the nature of the strategy selected and the sector in which it is applied, it is not feasible to project annual results. Trends will be monitored carefully, however, to ensure that sufficient progress is being made towards the end of project objectives.

#### 1. How Achievements will be Measured

District Health Offices currently have systems in place for collecting data on mortality and service provision, although these systems are of varied effectiveness. Under the project, each district plan will include the establishment of a more rigorous data collection system and the collection of baseline data on mortality and on six of the purpose level indicators<sup>9</sup>. Each district will compile annual reports on these indicators for each of the four years it receives support. The reporting system of the assisted districts is expected to become more reliable by the second year of project support. It is conceivable, therefore, that the more complete reporting will initially suggest some increases in mortality rates.

The project also aims to institutionalize these measures within the MOH's routine reporting system, and therefore continue to measure progress in assisted districts throughout project life. It should be noted that the indicators chosen are all necessary elements of a national health information system and are therefore not extraneous reporting requirements imposed for the sake of project monitoring. However, because of the enormity of the task of overhauling the MOH reporting system, adequate provisions will be made in the project budget for surveys and studies to complement these data -- and replace them in the event that the reform of the MOH system is not achieved. Of particular value for both measuring and achieving results will be repeats of the National Maternal Mortality Study.

The project will also compile national-level figures for each of these indicators using the EDHS and MOH/CAPMAS data. (Since these two sources differ markedly, they will be used separately to measure progress over the life of project.) The EDHS will use data compiled in 1992 (baseline), 1995 and 1999. CAPMAS data is compiled annually.

Results at the outcome level will be measured through project evaluations, knowledge, attitude and practice (KAP) surveys.

#### 2. Who will Measure

The exceptions will be breastfeeding practices, which will have to be measured by KAP surveys and the EDHS.

A Project Steering Committee comprised of representatives of the MOH, USAID, the prime contractor and UNICEF will have responsibility for overseeing project progress. Data collected by the districts will be compiled by the prime contractor and presented in the quarterly and annual reports to the MOH and USAID recording progress toward achieving project objectives.

The project will contract independently for KAP surveys, two project evaluations and two audits. A mid-term evaluation at the end of year three will permit the project to measure progress to date, examine assumptions of the original design, and make mid-course corrections. A second evaluation will take place after year five, to measure achievements and make recommedations for institutionalization of project activities. Other sources in USAID will finance repeats of the EDHS in 1995 and 1999.

In addition, the prime contractor will, on at least two occasions, convene workshops to examine and disseminate lessons learned from models (successful and otherwise) developed in both USAID and UNICEF supported districts for implementing the HM/HC strategy.

#### E. RATIONALE FOR SELECTED STRATEGY

## 1. Targetting High-Risk Regions

The gaping discrepancies between Lower and Upper Egypt and between urban and rural areas according to all human development indicators cannot be ignored. While work remains to be done throughout the country, the first priority must be to address the extreme poverty, deprivation and the resulting lost human potential in these highest risk regions. In Upper Egypt, 40 percent are poor compared to 29 percent in Lower Egypt<sup>10</sup>. The female literacy rate is 21 percent, compared to 31 percent in all of Egypt. Infant and maternal mortality rates are nearly double those of Lower Egypt. And with one third of the births in the country, Upper Egypt accounts for two-thirds of the deaths from neonatal tetanus. (Technical Annex, Tables 1-3, provide more relevant indicators).

This project paper tentatively identifies seven Governorates (excluding Giza) in Upper Egypt as the highest-risk regions to be targetted by the project. (As a governorate is a coherent administrative unit, it may be most efficient to implement project activities throughout each selected governorate.) If experience under the project is promising and resources permit, additional high-risk governorates could be added later.

# 2. Integrating Health Services

Under the **vertical** approach to health care, a single administrative unit is organized to meet a single objective (such as mass immunization) at each level of government, central, governorate, and district.

Egypt Human Development Report 1994, Institute of National Planning, p. 116. Moreover, 10 percent of the population in Upper Egypt is "ultra poor" as compared to 6 percent in Lower.

Even at the delivery level, a separate room and staff may be devoted to one service. An **integrated** approach coordinates the delivery of a number of interrelated interventions, such as antenatal care, safe pregnancy and delivery, immunization, maternal and child nutrition, and care for reproductive tract infections, and links these health services to family planning services.

Provision of health services in an integrated manner is more difficult, as health care providers must have a wider range of skills and exert additional effort to coordinate their services, yet it should increase efficiency by reducing the number of "missed opportunities" for providing complementary interventions. Moreover, because the causes and treatments of reproductive, infant and child health problems are often inextricably connected, it is ultimately more practical and effective to address them through the integrated approach.

The Egyptian reproductive and child health sector is ready to make this transition, having consolidated the major component health services through vertical programs with assistance from USAID predecessor projects. Some new elements will have to be introduced and others strengthened, but the emphasis must now be to develop the capacity of the health care system to provide to everyone an integrated minimum package of essential reproductive and health services. The project strategy will entail using existing structures at the central level to ensure all these services are delivered at the local level, at least in the targetted areas.

## 3. Community-Based Approach

Virtually all international health organizations agree that primary health care services should be provided at the lowest level of the health care system capable of performing them adequately, and that more human and material resources should be directed to the periphery. Moreover, as **mothers** are the critical "front line" health care providers, empowering them with knowledge of the basic principles of preventive health care will allow them to care more effectively for themselves and their children and to know when to seek outside assistance. To ensure they receive proper care when they do, it will be necessary to enhance the capacities of the **public/private providers**; namely, general practitioners, obstetricians/gynecologists, nurses, pharmacists, dayas and non-governmental organizations.

CSP and CDD have shown that mothers, reached appropriately, can serve as powerful providers of health care to their children. The activities of USAID's Local Development II project, the PVO Umbrella project and the new CEDPA project, together with the activities of UNICEF and many Egyptian non-governmental organizations (ENGOs), all demonstrate the usefulness of **working through community organizations** to reach and empower household members.

The CSP and CDD Project offer another related lesson: it is impractical to expect the central level of the MOH to have the means to assure quality services and to supervise and manage the health providers at every health care facility in the country. Data from the NMMS revealed that the quality of health care provided locally, whether through the public or private sector, is still not of a quality to

prevent illness and avoidable deaths. **Responsibility for quality control and supervision must be delegated to local communities,** in order to encourage the marshalling of local resources and take advantage of the higher levels of accountability. Such a strategy should also help bring medical health providers, both public and private, into closer working relationships with their communities.

Experiences of USAID and other donors suggest that both financial and human resources exist at the community level which, if better managed and organized, could be invested to improve health care delivery within homes, clinics, and local district hospitals. Such resources could, for example, organize transportation systems and blood donor registration systems to serve in obstetrical emergencies, provide volunteers to organize educational programs, provide labor to refurbish local health facilities. To this end, therefore, the project will also involve Egyptian NGOs.

#### 4. Other Lessons Learned

To carry out this new approach, the HM/HC project will build upon the successful vertical programs of predecessor projects, namely EPI, ARI, CDD, child spacing, and will continue to replicate the Model Clinics begun under the CSP. HM/HC will take advantage of the extensive training infrastructure these projects have created, as well as the vast cadre of trained health care providers. It will carry on the excellent collaborative relationship the CSP has established with UNICEF. And it will make use of the expertise produced by the Field Epidemiology Training Program (FETP).

The far-reaching **mass media campaigns** produced for more than a decade by USAID's Population/Family Planning I-III and CDD Projects demonstrate the efficacy of informing and motivating consumers of health services -- households, especially mothers. These projects have also highlighted the need to reinforce the awareness of services that is generated by mass media campaigns with one-on-one counseling that offers detailed and accurate information as well as a "client-centered" approach to service delivery.

The Population/Family Planning II Project's successful Minya IEC (Information Education Communication) Initiative, which increased contraceptive prevalence from 21.9 percent to 30.2 percent in one year alone, demonstrates the merits of targeting needy Upper Egyptian Governorates with community-oriented IEC activities. The Minya Initiative also demonstrated that "the ability of governorate-level offices of national agencies to plan, implement, and modify programs without the encumbrance of a centralized review process" is key to achieving results.

Finally, the predecessor projects have demonstrated the importance and effectiveness of building institutional capacity through a wide range of **training** programs. The CDD taught thousands of health care professionals the proper treatment of diarrhea with ORS. The CSP trained thousands more to

Kemprecos, L.; Storey, D.; et.al., 1994. "The impact of the Minya IEC Initiative." Johns Hopkins Project Report, page V.

establish and manage the cold chain to deliver immunizations, and has trained dayas to perform clean safe deliveries. These projects have also shown that it is essential to link the training health workers receive to the problems they confront in their actual work environment, and to strengthen their clinical competence as well as their abilities to plan, organize, and monitor administrative and service units.

## 5. Relation to Other USAID Projects and USAID Strategic Objectives

The project will contribute directly to USAID/Cairo's Strategic Objective 5, "Improved maternal and child health," and partially to Strategic Objective 4, "Reduced fertility." In addition to promoting reproductive health care, HM/HC will coordinate with the Population/Family Planning III project to enhance collaboration and referrals between family planning and other health providers. HM/HC will also extend the concepts being pursued under the Cost-Recovery Project to the primary care service level in HM/HC districts. Special efforts should be made to develop links with the future Female Education Project and Development Training II.

By empowering districts with training and technical assistance to develop their own plans for providing the integrated essential package of reproductive and child health services, the project will contribute to the achievement of USAID/Egypt's Strategic Objective 8, "democratic institutions strengthened to contribute to governance." Wherever possible, therefore, HM/HC shall link with USAID democracy projects and the CEDPA and PVO projects.

# 6. Relation to Government of Egypt Priorities

The project responds directly to the priorities of the Government of Egypt, Ministry of Health Five year Plan (1992-1997), which identifies the following guiding parameters for MOH activities:

Increasing community involvement in financing, administration, and implementation of health services:

Giving priority to MCH, family planning and community health in all health development programs;

Using the following selection criteria for new health projects and programs:

- a. Primary health care, particularly MCH and FP
- b. Focus on under served groups and areas
- c. Focus on preventive and emergency services.
- d. Focus on the implementation of on-going services.

#### II. ASSISTANCE INTERVENTIONS

## A. HEALTHY MOTHER/HEALTHY CHILD DISTRICT STRATEGY

The following discussion suggests a possible approach, based on information gathered by a design team over the course of two months. Clearly, however, this approach will be modified by further negotiations with the MOH, the perspectives and expertise of the various implementing agents, real life experience under the project, and changes in the project setting over time. Thus this is a proposal, not a blueprint, for action.

The district will be the locus of implementation, but upward links must be forged with the administrative structures of governorates and national directorates as well. Investments, therefore, will be made at three levels. In particular, it will be necessary to strengthen **governorates'** capacities to monitor and supervise district activities as well as to plan and manage for the governorate as a whole.

By delegating to the district level the authority to plan and providing the enabling resources, the project will develop in **District Health Offices** a greater ability to assess community needs, manage existing resources, and improve the quality of health care. In short, districts will assure an integrated minimum package of health services is put in place with community support.

The district is the administrative unit closest to the community, and is thus most direct level at which to reach those of greatest need with improved quality health services and strengthened health care referral systems.

- ! The district is a unit of the governorate, representing a clearly delineated administrative and geographic area with a known population, and including representatives of the government, the private sector, NGOs, and the community.
- ! The District Health Officer, with his staff, has direct responsibility for all health care services performed at primary health care facilities, and therefore must become capable of planning, budgeting finances, and managing his district.
- ! The District Health Officer is a member of the executive local council. Through this council inter-sectoral cooperation can be achieved.
- ! District Health Officers are usually in active, frequent contact with the elected People's Council and can mobilize this body in support of the planning task.
- ! The links between public health authorities, the private sector, universities, and NGOs involved in health and social mobilization are closer at the district level, but they also differ from one

district to another. Thus referral systems will be both easier to develop and stronger if developed district by district.

- ! In practice, the most effective regulation of physicians occurs at the district level, where the practices, habits, and skills of physicians are known, at least informally, by the community and other health officials and providers.
- ! Household members, in Egypt, for the most part, prefer private providers, particularly for curative care. However, these providers are trained in public universities managed by the MOH and receive continuing education from the MOH. Virtually all private sector physicians are also employed by the MOH or other public organizations. Thus, the best place to reach and train private providers is through their assigned place of work at the local level in the district.

# 1. The HM/HC Package

The HM/HC package of clinical services is not new: policies and protocols currently exist to guide the provision of most of these reproductive and child health services by both the public and private sector. Many elements are already being offered but are either of low quality or are failing to reach at-risk populations. The HM/HC project will enable districts to improve the quality and coverage of the full integrated package. It will help district health leaders in each of the targeted districts to pinpoint the actual gaps and weaknesses in the provision of this "minimum package of essential services," and to draft a specific plan to solve these problems at their districts. The HM/HC package contains three components:

#### - Better quality reproductive and child health services:

- ! Premarital examination and counseling
- ! Prenatal, delivery, and postnatal care
- ! Neonatal care
- ! Family planning
- ! Promotion of immediate and exclusive breastfeeding
- ! Child preventive services: immunization, nutrition, growth monitoring, ORS
- ! Sick child case management (diarrheal disease, ARI)
- ! Reproductive health services (family planning, reproductive tract infections, education on harmful practices)
- ! 40th day integrated visit for mother and child post-natal check-ups for mother and child, BCG for child, family planning counseling
- ! Counseling and health education on all the above

## **Better social/community services:**

- ! MOH and SIS health education in the community
- ! NGO-sponsored health education, including community campaigns for breastfeeding, accident prevention, 40-day integrated visit, harmful practices, etc.
- ! Engaging physicians in community education
- ! Health education and prevention elements of the school health programs provided by the Health Insurance Organization
- ! Public/private blood bank registration
- ! Public/private discussions to seek solutions for transport of high risk and emergency cases
- ! Outreach and home visits by MOH nurses, NGOs, and community volunteers
- ! Informal health education (self-initiated woman-to-woman, woman-to-child, husband-to-wife, child-to-child education)
- ! Effective referral systems among different health providers

# - Upgraded district-wide management and monitoring systems:

- ! District health committee planning and monitoring of implementation, including conduct of medical audits and quarterly and annual reports on impact indicators
- ! Effective and simplified reporting system
- ! Cost-recovery with funds retained by districts permitting eventual partial sustainability of district management system
- ! Information system in all health centers permitting district-wide monitoring of process and outcome indicators
- ! Regularized supervisory visits by the District health team
- ! Linked service delivery and patient referral within and among health units.

#### 2. District-Level Investments

The HM/HC Project will provide technical assistance, commodities and seed money to districts to allow them to assess their specific priorities, develop and implement a plan for delivering the HM/HC package. Specifically the project will provide:

! Technical assistance at the governorate level to help districts with the needs assessment and planning; the establishment of cost recovery strategies and management and monitoring systems; and the development of coordinated referral systems linking all levels and types of health facilities within and, as necessary, beyond the district;

- ! Grants to ENGOs working in the districts to allow them to help implement components of the district plan, especially health education, outreach and community mobilization;
- ! Commodities, such as vital and appropriate medical equipment, a computer, a vehicle to provide outreach to more remote areas;
- ! Seed money to allow minor "facelift" renovations of selected public health facilities;
- ! Training for:
  - -District public and private health providers in how to provide effectively the full package of health services
  - -District clinic managers (doctors/nurses) in the management of referral services, data collection, and cost-recovery
  - -District supervisors (DHO and nurses) in the supervision and monitoring of health services
  - -Doctors and nurses to become trainers in the community
  - -Dayas
  - -IEC health workers and agricultural extension workers in health education and outreach; and
  - -School teachers in health education and school physicians on how to provide the full package of essential health services.

Experience to date indicates that communities must invest their own financial and human resources in the implementation of their plans if they are to have a stake in a positive outcome. Galvanizing such support, therefore, must be an integral part of the implementation plan for each district. In addition, the district health committee must be delegated authority to decide how the funds recovered through fees for service will be allocated to support continuation of the district's activities after the project ends.

## 3. Governorate-Level Investments

The project will provide support to HM/HC targetted governorates to:

- ! Develop their capacity to work with districts to plan, budget, manage, supervise, and monitor health and community services;
- ! Help identify the local institutions and leaders who can spearhead the development of HM/HC districts;
- ! Develop a cost-recovery policy that will permit individual health facilities and district health offices to retain a portion of the fees for services. These revenues can be used to provide

incentives to personnel and to support the recurrent costs of providing the HM/HC health and community management package;

- ! Train staff in supervision, monitoring, planning;
- ! Collaborate with local universities in district training;
- ! Purchase vehicles for the supervision of district activities.

## 4. National-Level Investments

In support of the district strategy, the project will provide assistance to the **Ministry of Health** at the central level to:

- ! Sustain the accomplishments of the CSP and integrate these into the HM/HC strategy, especially the gains made in the areas of EPI, CDD, ARI, Model Clinics and training;
- ! Develop national standards for care for HM/HC package components, e.g., emergency obstetrical care, breastfeeding, health information systems, protocols for supervision;
- ! Consolidate and simplify the routine reporting system for health facilities to assure that indicators needed to monitor HM/HC districts are reliably collected and transmitted and that the duplication and collection of unnecessary data are minimized;
- ! Strengthen planning and priority setting, including defining the priority beneficiaries for HM/HC assistance, decentralizing relevant authorities, and making full use of trained epidemiological expertise;
- **!** Build on the capacity of the MOH to provide pre-service and in-service training in clinical areas and in management and supervision, including modifying the current training program to include the HM/HC package, developing standards, manuals and teaching aids for the training of trainers, and strengthening linkages with medical universities;
- ! Procure small equipment for HM/HC districts;
- ! Assist governorates and districts to identify operational research needed to support district service delivery activities.

The project will also provide support through the **Ministry of Information** (MOI) to build on the experience of the Information, Education and Communication (IEC) Center of the State Information

System (SIS) to develop mass media campaigns to further project objectives. The HM/HC project will allow the IEC Center to:

- ! Relocate to more adequate facilities;
- ! Establish a new department with a new cadre of employees to produce HM/HC IEC campaigns, including TV spots and videos. Messages for the HM/HC department should include the importance of antenatal care, popularization of the "40th day visit" and optimal breastfeeding practices;
- ! Provide technical assistance and training to this new department and equipment as necessary.

### **B. LONGER-TERM STRATEGIES**

The project will also promote selected national strategies that will make essential but longer-term contributions to achieving project objectives.

# 1. Strengthening the Curricula of Medical, Nursing and Pharmacology Schools

A critical source of the low quality of care in the reproductive and child health sector is the poor preparation these practitioners receive in school. Academic curricula are missing elements of what are considered the essential reproductive and child health services, undergraduate programs offer inadequate clinical training opportunities, and faculty are not always effective teachers. Strengthening these programs is a necessary condition to improving the skills of future health care providers, although the task will admittedly be one of the most challenging of the project.

HM/HC will continue efforts begun under CSP to strengthen the curricula of medical schools through national conferences, and expand this strategy to nursing and pharmacology schools. The strategy could involve: providing technical assistants to work with task forces comprised of the faculty members of universities on curriculum development and the upgrading of faculty training skills; organizing conferences for university faculty and members of the Medical Sector of the Supreme Council of Universities, the entity with ultimate responsibility for medical school curricula and policy setting; and providing long and short-term training, both in-country and off-shore for selected faculty members. A cooperative agreement with Wellstart will strengthen the breastfeeding components of these curricula.

In Upper Egypt, nurses are essential conduits of care, counseling, and information for female clients. They are also more often rooted in their communities, especially rural communities, than are young doctors. Special attention, therefore, will be paid to strengthening existing nursing schools, reinstituting nurse-midwife training programs (not available in Egypt since 1972), and encouraging alternative nurse training programs that would allow women from more conservative communities to attend. HM/HC will build on the promising experiences of the CSP's nurse-midwife training program.

Egypt has approximately 31,000 pharmacists, and these professionals play an important and respected role as health care advisors. Ensuring pharmacists are properly trained in the features of the HM/HC package of services should therefore be another important part of the strategy for reaching high-risk mothers.

## 2. Facilitating loans to private physicians, female providers and group practices

Private practitioners are increasingly important health care providers in Egypt. USAID/Cairo's Cost Recovery for Health Project has launched a loan guarantee program under the Credit Guarantee Corporation (CGC) to facilitate the expansion of private medical practices. This fund is under-utilized.

Moreover, less than five percent of CGC loans have gone to female physicians.

Technical assistants under the HM/HC project will thus provide support to the CGC to mount publicity campaigns to raise awareness, especially among female practitioners, of the existence of the CGC health practitioners program and other loan programs. Publicity campaigns that direct information about the CGC to female providers who could open practices in HM/HC districts will be a special priority. Such campaigns could also encourage innovative group practices, such as those in which workday is divided into four-hour shifts thus permitting married female doctors to work.

In an effort to ensure the quality of the care offered by private providers, the project could, through the prime contractor, provide loan recipients with training in the management of clinic services and in the provision of the HM/HC essential package. The physicians, in turn, would receive certificates attesting to their training.

## 3. Assistance to the Health Insurance Organization (HIO)

The public sector Health Insurance Organization recently expanded its program to cover all school children, and now provides health screening and limited services to the approximately 14 million students under the school medical insurance program (SMIP). This program, particularly its services for adolescent girls, could be used to complement HM/HC district activities. Preventive interventions such as iron supplementation to young girls before they become mothers can have a significant impact on reducing the high and deleterious levels of anemia. Moreover, since adolescent girls have been shown to be important agents for change in families and communities, educational programs directed to them should have broad impact.

# 4. ENGO Coordination and Capacity Building

NGOs can play an essential role in strengthening democracies by enhancing popular participation, providing a private partner to government and catalyzing community action. In addition, they often respond to emerging community needs more quickly and effectively than the public sector.

The U.N. International Conference on Population and Development (ICPD), held in Cairo in September 1994, galvanized Egypt's development-oriented NGOs as few recent events have. Hundreds of ENGOs participated in the conference. It also drew attention to critically important but controversial issues, such as practices harmful to the health of women, abortion, and reproductive morbidity. The Egyptian NGO Steering Committee for ICPD, which worked with the support of high-level government policy makers, involved 35 ENGOs in participatory planning sessions over the course of more than two years. Since the ICPD, the momentum of all ENGOs has continued.

The HM/HC project should build on this invaluable momentum by providing support for capable national ENGOs that are advancing aspects of the HM/HC agenda at either the national or district level. Support to ENGOs, including technical assistance when required, will be made available through a U.S. Private Voluntary Organization (PVO) acting as an "umbrella" for assistance. ENGOs already working on women's rights, children's health, family planning, and overall development include the Upper Egyptian Association for Education and Development, CEOSS, the Egyptian Women Medical Association, Egyptian Fertility Care Society, Clinical Services Improvement (a family planning service provider), the Egyptian Women's Breast Milk Society, the Egyptian Society for the Prevention of Harmful Practices to Woman and Child and many other worthy groups. Some of the country's most influential women leaders are involved in these efforts.

At the district level, the project will support ENGOs to help mobilize districts to develop and implement the HM/HC plan. At the national level it might support conferences and coordination activities; mass media campaigns; policy analysis; citizen education and action programs; and service provision. The umbrella PVO will also devote resources to building the capacity of these ENGOs, as most have limited full-time staff and financial, management and service capabilities.

#### III. INDICATIVE PLAN OF ACTION

### A. USAID/MOH ACTIONS

The MOH participated actively in the development of this design through regular meetings between its Project Committee and the design team, and the outlines of the design were vetted with other key officials, including the Minister himself. All those consulted agreed with the major principles of the strategy. Further discussions are being held with the involved central Ministry staff as well as with the officials of at least a preliminary group of the target governorates -- to ensure their full concurrence in the plan. The following is the current best guess as to how implementation will unfold.

Under HM/HC, project implementation will be led by MOH rather than placed under the authority of a separate project directorate as in the CSP. USAID and the MOH will share responsibility for guiding project implementation and for monitoring progress and impact. Together, they will identify technical assistance to be used for both project start-up and longer-term support. Start-up activities of the MOH are likely to be supported through a buy-in to an appropriate centrally-funded USAID project such as "Mothercare." A project-funded Personal Services Contractor will join USAID/Cairo's Health

Office to help with project management. USAID/Cairo's Procurement Directorate will be responsible for procuring the off-shore commodities according to lists developed by the MOH with the assistance of the long-term prime contractor.

National-level activities will begin immediately to lay the groundwork for the district-level strategy, which will be phased in gradually. UNICEF's activities should begin in year one of the project, but the USAID prime contractor is not expected to begin district level implementation until year two or three. Ultimately, the project aims to cover seven governorates of Upper Egypt.

## 1. Start-up

The MOH must assign all appropriate project staff. At the central level, it will designate the individual responsible for general oversight, most likely the First Undersecretary for Basic and Preventive Services, and a project Executive Director, most likely from the MCH department. The MOH will also select about twelve staff to act as counterparts to technical assistants and to be responsible for day to day implementation of the project. These staff should include representatives of such relevant departments as EPI, CDD, ARI, Curative Care, and School Health.

The MOH should assign graduates from the Field Epidemiological Training Program (FETP) to assist governorates with planning for the project. At the district level, the MOH must ensure that each district health office is fully staffed with a District Health Officer and at least one assistant before the development of the plan for that district begins. Appointment of all of the aforementioned staff will be a **condition precedent** to release of funds under the grant agreement.

Still at the central level, the MOH will appoint members to a **Project Steering Committee**, which will also include representatives from USAID, UNICEF and, eventually, the prime contractor. The steering committee will be responsible for setting project policy, meeting quarterly to monitor progress, and reviewing the plans developed by District Committees and approved by Governorate Committees. Finally, the MOH and USAID will identify key agents for the district and long-term strategies who will require special training and will select the first districts to be covered under the project.

One major activity for MOH under the project for year one will be the **consolidation and streamlining of the MOH health information system** This activity will build on efforts begun under the CSP, and will require technical assistance that might be provided by the FETP or Mothercare. These efforts will then be continued by the prime contractor.

The MOH will form a **Health Information System Task Force** for this purpose, which will include the MOH directors and staff most directly concerned with information collection, analysis, and representatives from the governorate and district levels. Technical assistants will work with the task force and MOH senior staff to assess information needs, analyze existing systems, and come to a consensus on the reporting system that will provide adequate useful data without overburdening the data collectors. Completion of this system might become a condition for third year funding for the project, since the information system will be used to monitor the HM/HC district strategy.

Other important activities during year one:

The MOH, in collaboration with USAID, will assess the relevant health and other human development indicators for the region of Upper Egypt to **determine the definitive list of target Governorates**.

MOH will define the HM/HC package to be implemented by the project, including standards for care, protocols, criteria for quality assurance and supervision. The MOH will also develop training materials and begin training of trainers. Technical assistants will work with the MOH to revise MOH training policies and programs so that practicing physicians, nurses, and nurse midwives receive field training to introduce them to the HM/HC essential package of services. In subsequent years, the technical assistants will help the MOH strengthen its skills-based training systems.

Grant to UNICEF. USAID/Cairo will negotiate with UNICEF the terms of the HM/HC grant for UNICEF's district-level activities to further project objectives. The MOH will participate in these discussions to ensure that the plans complement those of the MOH and other relevant actors. UNICEF will take responsibility for the implementation of the HM/HC package in three Governorates, for example in Sohag, Assiut and Minya, where it is already working. The grant may also allow UNICEF to expand its Baby Friendly Hospital initiative. USAID will disburse the first tranche of this grant in year one, thus enabling UNICEF to begin implementation of its model within the first year of the project.

**USAID** and MOH will assess the requirements for sustaining achievements of Child Survival Project during the start-up of HM/HC although the CSP will continue through August, 1996. The assessment will identify the critical activities that the GOE or other donors will not be able to support, and will budget accordingly from HM/HC. Selected support for competency-based training, maintenance of the cold chain, and the sustaining diarrheal disease activities are anticipated to be included, especially during the first four years of the new Project.

Analysis of existing cost-recovery policies in primary and secondary health units. An options paper will be prepared for the MOH identifying the feasible national policy reforms that would increase productivity-based payments for health providers and/or to provide for more significant fee retention at the level of health units and districts. In addition, the paper will examine options for coordinating the family planning fee system with health unit fee systems.

Selection of prime contractor and PVO umbrella. USAID, with technical advisors from the MOH, will select a prime TA contractor that has the management, primary health care and community mobilization expertise to implement a complex project with multiple management units and actors; USAID and MOH will also select the umbrella PVO. These two awards are expected to be made by the end of year one of the project; the prime contractor will be a direct USAID contract, the PVO umbrella agreement may be a direct USAID contract, cooperative agreement or grant.

A Cooperative Agreement between Wellstart and USAID/Cairo will also be negotiated and activities will begin in year one. This agreement will provide one technical advisor for four years and additional short-term technical assistance to spearhead a national effort to improve breastfeeding practices in Egypt. Under this agreement, a National Breastfeeding Education Center will be established within a major university to serve Egypt as well as other countries in the region. The center will strengthen the curricula of medical and nursing schools as well as training programs for hospitals. The agreement will also strengthen community level programs of the MOH and others (dayas and mother support groups) and organize IEC activities to promote proper breastfeeding practices.

## 2. HM/HC District Strategy

Implementation of the HM/HC district strategy will begin in two governorates after the prime technical assistance contract has been signed, most likely in or after year two of the project. The following is the best guess as to how action will unfold.

The prime contractor will assign a three-person team of Egyptian technical assistants to each governorate. The Governor will designate counterparts for these technical assistants and will form (or reactivate) the **Governorate Health Committee**, which will be responsible for governorate-level planning and oversight of the HM/HC district strategies, including approval of each district plan.

A priority for governorate-level technical assistants should be an examination of policy options for delegating greater cost-recovery authority to districts. MOH project staff will work with technical assistants from the prime contractor on this effort, as well as on the training of relevant governorate staff in the contents of the HM/HC package and techniques for supervision and quality control.

To the extent necessary, especially in the early years of the project, governorate staff will help identify and mobilize district leaders. The governorate-level technical assistants will then work with the selected district leaders to form a **District Health Committee**, which will carry out a needs assessment to determine the specific gaps in reproductive and child health services, develop a plan for introducing the HM/HC package into each participating health unit, and organize other complementary community-based activities.

It is expected that there will be broad public and private participation in the process of needs assessment and in development of the district plan. While the responsibility for district leadership for health will ordinarily devolve to the District Health Officer, it is possible that in some communities, other leaders will emerge as well. Thus the prime contractor may provide training to the district health officer and his or her staff, as well as to local community leaders, representatives of private health facilities, local NGOs, women leaders, etc.

The participating district residents will determine what activities they will carry out and what resources they will need to tap, from within the community and from project sources, to meet the standards of an HM/HC district. Each district plan should cover four years, but provide more details about the

activities to be carried out during the first year (training, health education, community mobilization, and resource requirements). Among the commodities that might be provided by the project are a vehicle for district supervision and a computer for district monitoring of services.

The process of community mobilization, needs assessment, and plan development is expected to take about nine months, while start-up of district activities would begin approximately three months after that. Each initial district plan will be officially approved by the Governorate Health Committee and reviewed by the Central Project Steering Committee. As soon as a plan has been approved, activities and funding can begin. While receiving support, each district will be assisted to prepare annual plans anticipating the next year's activities, and semi-annual progress reports. These reports will be collected and compiled into summary reports by the prime contractor. The project will support a district for an estimated three to four years.

After a critical number of districts have been launched in the first governorates, the technical assistant teams will organize a conference to review and share lessons learned, adapt working strategies accordingly, and expand the efforts to the next governorate(s). Assuming that implementation is going well, additional governorates should be added in year three, and the development and funding of subsequent district plans should continue on a rolling basis. Midway through project implementation, additional workshop(s) will be organized to disseminate lessons learned.

## 3. Training Plan

The project proposes financing a considerable amount of training as a means to achieving its objectives of increased quality of reproductive and child health services and improved capacity of districts to plan and manage their health care systems. The Training Annex (g.vii) provides a menu of options for this strategy. The precise number and type of personnel to be trained will be defined by a training needs assessment that will be carried out under the project.

Most of the proposed training would be provided in-country using existing institutions. Medical universities and teaching hospitals would be used for clinical training, as could relevent university-based training facilities such as the Ain Shams University's Regional Center for Training (RCT) and the Center for Social and Preventative Medicine at Cairo University. The Ministry of Health's training department, the General Directorate for Human Resource Development, should be the site for pre-service. Inservice medical training and training of governorate and district personnel in planning and management will take place in existing local training sites.

Off-shore participant training should be limited to specialized areas for which in-country training is not available and offered to MOH staff. Candidates could be identified through their roles in planning or implementing the decentralized approach or in revising existing academic and practical training curricula to reflect all elements of the integrated HM/HC package. This category of training would include observational tours, Masters degree scholarships and short-term training in such relevant topics as public health, health care management, maternal and child health, epidemiology, and nutrition.

**Local training** should cover the majority of national, governorate and district level training needs, again using predominantly MOH staff and university faculty. The HM/HC training program will build on the extensive foundation established under the CSP, including well-equipped training facilities and trained staff. It should also strive to integrate the materials of the vertical programs into the HM/HC training package. A training of trainers program for the three components of the HM/HC package (clinical, community mobilization and management/monitoring) should be developed at a national level within the MOH to provide trainers for the central, governorate and district levels.

Training programs will also be needed at governorate and district levels, again using existing institutions (such as local universities, teaching or specialized hospitals, health centers and health bureaus). These programs could train governorate health personnel, district health officers, health educators, physicians, nurses, midwives and dayas, health clerks, data management specialists and other relevant individuals.

# 4. Longer-term Strategies

# a. Assisting universities and schools to strengthen and update curricula for health care professionals

Beginning in year one of the project, local support will be provided through a Project Implementation Letter (PIL) with the MOH for national training. This training should be coordinated with that of the Development Training II project currently under development.

Technical assistants will work with the faculty of medical, nursing and phamacology schools to expand academic curricula to incorporate the contents and provision of each component of the HM/HC package. Technical assistants will also help universities augment clinical training opportunities in basic and preventive health, developing programs to allow students to serve internships in well-run primary health care facilities such as the Model Clinics developed under the CSP or, ultimately, HM/HC district clinics.

In subsequent years, technical assistance might work with the Supreme Council to help reform policies and practices in medical schools that currently limit the recruitment of female students to the OB/GYN specialty and reduce their likelihood of graduation. Because women clients prefer female obstetricians-gynecologists, and because most of the country's OB/GYNs are male, filling this gap should be an important long-term objective of the HM/HC project.

The project should also pursue the possibility of establishing non-residential nurse training programs in certain districts of Upper Egypt where resistance to sending young women out of the community is especially strong.

## b. Assistance to the Health Insurance Organization

Beginning in Year 2 of the project, the prime contractor will provide technical assistants to work with HIO at the central, governorate or district level, as appropriate, to strengthen the preventive services of the student medical insurance program (SMIP) offered in the targetted districts. Particular emphasis will be given to nutrition and health education programs for adolescent girls. If necessary, technical assistance may work at the central HIO to help set national standards for screening examinations, preventive care and treatment of school children.

## c. Facilitating loans to private physicians and group practices

In year two of the project, technical assistance from the prime contractor will begin working with the CGC to improve its promotional campaigns for the medical practitioner loan guarantee program. The promotional campaigns should encourage the formation of private practices that provide the HM/HC clinical package, especially female group practices in Upper Egypt. The prime contractor might also organize workshops to teach physicians how to apply for loans and establish and manage a medical business, and provide the HM/HC package.

#### B. OTHER MAJOR ACTORS

## 1. Ministry of Information

In year one of the project, through a PIL with the Ministry of Information, USAID will provide support for the establishment of a new HM/HC department in the State Information Service's IEC Center. MOI will appoint an Associate Deputy Director and ten qualified staff from its nearly 20,000 employees to work in the the HM/HC department. The Associate Deputy Director will work under the IEC Center's Deputy Director, who is now in charge of family planning activities. Appointments of the required staff will be a **condition precedent** to the release of funds under this agreement. As necessary, training and/or orientation will be provided for the new staff.

The current IEC center is located in a decrepit and unsafe building. Moreover, it is unlikely to be able to accommodate the new HM/HC department. Another **condition precedent** to disbursement, therefore, will be the relocation of this important center, including both the Family Planning and HM/HC departments to allow for maximum synergy between their activities, to a more appropriate facility.

In year two of the project, the SIS-IEC Center will receive operational support to begin production of TV and radio spots and longer videos on relevant topics such as the importance of antenatal care and proper nutrition during pregnancy, immediate and exclusive breastfeeding, and mobilizing communities in obstetrical emergencies. Air time will be provided free to the project as part of the GOE's in-kind contribution.

Short-term expatriate technical assistance in the first six months of year two will help the new HM/HC SIS staff to get rolling. If necessary, the prime contractor will field a resident technical advisor for the HM/HC department in the second half of year two.

The project will also make use of SIS Local Information Centers (LICs) in the HM/HC districts to organize community education programs. Such efforts will be tailored to the individual districts, and should be designed in collaboration with the local MOH Health Education Officers so that the roles and responsibilities of each are clear and complementary.

Over years three and four, staffing at SIS of seconded MOI employees, will be phased in, reaching an estimated complement of 25. Television, radio and other IEC outputs will increase as capacity is built at SIS and staff receive local and offshore training. The phased-in approach is designed to increase SIS's capacity to handle a new slate of HM/HC activities without interfering with its work on USAID's Population/Family Planning III Project. Throughout the project, the leadership of the SIS IEC center, the MOH HM/HC staff, and USAID's Population and Health Officers will collaborate to assure a synergism develops between national family planning promotional campaigns and reproductive and child health campaigns.

#### 2. Prime Technical Assistance Contractor

The prime contractor will assist the Ministry of Health, Governorates, and the Ministry of Information in major aspects of implementation. The technical assistance will include technical/medical, IEC, community organization and management expertise. The prime contractor will provide technical assistants to the central MOH, the MOI, and those governorates in which the HM/HC district strategy is being implemented. Technical assistants will help the central MOH to set standards for the HM/HC package, develop relevant policies, continue the reform of the health information management system, strengthen training programs for health care practitioners, carry out operational research, assist the CGC to promote the medical loan program and help HIO/SMIP strengthen its preventive programs. Three Egyptian technical assistants in each governorate will develop systems for planning, supervision, and policy formulation and help mobilize districts.

Following adequate financial assessments, the MOH will manage the funds that will be made available to districts to finance implementation of the district plan including possible seed grants to local ENGOs; provide to USAID lists and specifications of commodities that need to be procured over the course of the project; and provide to USAID quarterly and annual reports on progress towards achieving project objectives and annual plans anticipating future actions.

#### 3. PVO Umbrella

The PVO umbrella will be responsible for the award and financial management of grants to Egyptian NGOs that submit proposals for activities to promote reproductive and child health. It will also provide technical assistance to enhance the capacity of these ENGOs and support their transition to institutional self-sufficiency and their effectiveness in encouraging civic participation.

## 4. CDC-PASA/ Field Epidemiology Training Program

The Field Epidemiology Training Program (FETP) was launched in 1991 through a PASA with the Centers for Disease Control (CDC) funded under the CSP. Its objective is to establish an MOH institution that can ensure a cadre of field-based epidemiologists to advise the Ministry and investigate public health questions. HM/HC will provide funds for the PASA with CDC to continue to provide technical assistance for four years.

It is essential, however, that the MOH prepare to institutionalize this program, which has been underway as a free-standing unit since 1992. The MOH must identify the department within which FETP will be housed and appoint qualified MOH counterparts to the CDC trainers who will sustain the program after external support ends. The MOH must also establish staffing plans that make constructive and effective use of the epidemiologists trained, at central and Governorate levels. In particular, epidemiological expertise will be needed in the Governorates supported by the project.

The grant agreement will therefore contain **covenants** establishing benchmarks to ensure that such steps towards institutionalization are taken.

**5. Selected buy-ins** to USAID centrally-funded projects may provide USAID with flexibility in planning assistance for the HM-HC project. Since unlike many developing countries, Egypt has a large supply of qualified health professionals employed at its public and private institutions and universities, USAID will assess carefully the availability of national expertise before bringing in long-term and short-term expatriate assistance through buy-ins. Potential centrally-funded sources for buy-ins are OMNI, Mothercare and Basics.

#### C. TIME FRAME

The project is planned to extend over six years. National and some governorate preparation will begin during the first project year, most likely with assistance from a buy-in. UNICEF's activities are also expected to begin at the district level in the first year. The prime contractor's district-level activities are not expected to begin in earnest until second or even third project year. Districts are anticipated to require one year to start up and to be supported for an estimated four years.

#### IV. ANALYSIS OF FEASIBILITY, KEY ASSUMPTIONS AND RELATED RISKS

#### A. DESIGN ASSUMPTIONS AND RISKS

The HM/HC strategy represents an important experiment for both the USAID Health Office and the Ministry of Health. Hitherto, USAID has supported the MOH to develop centralized vertical health programs. As a result, both institutions are relatively inexperienced with decentralized administration, social mobilization, and efforts to coordinate and integrate different health service activities within and among health units. Although both the MOH and USAID are committed to the new strategy, its successful implementation requires considerable rethinking and reworking of administrative habits on both sides.

USAID will need a high level of comprehension of the district strategy and a flexible approach to planning, funding and managing social mobilization in the districts. USAID oversight will extend beyond the central MOH to the governorates and districts where implementation takes place, thereby increasing the management burden on USAID.

The HM/HC strategy seeks to reduce the risks associated with an innovative strategy in three ways.

First, UNICEF, which has already gained on-the-ground experience at the district level in maternal and child health, will be given a grant to develop HM/HC districts in an estimated three governorates (about 35 districts). A tranche of UNICEF's grant will be awarded in Year 1 so that these HM/HC Districts can get an early start. While the overall project objectives will be shared, it is expected that UNICEF's strategy for supporting HM/HC districts may differ somewhat from that of USAID's prime contractor. This is seen as an advantage, as it will permit different approaches to emerge that can be exchanged during workshops on lessons learned. USAID, UNICEF and the MOH will nonetheless collaborate closely in the process of implementation.

Second, for the remaining HM/HC districts, which the MOH/USAID will support with a capable prime contractor, implementation will be phased in. Activities will start in approximately six districts within two governorates, so that the work is done well in a few early trials. As effective models are developed, lessons assessed, and strategies adapted accordingly, additional districts will be added.

Third, the project will simultaneously enhance governorate capacity to plan and budget for HM/HC districts -- to supervise, monitor, and train the district health personnel, both public and private. The project will provide technical assistance to enable governorates to develop the policies (such as cost recovery) and systems necessary to support HM/HC districts. These same technical assistants will work with districts to support their efforts to organize district health committees, carry out health needs assessments, and develop plans for providing the minimum package of essential services in the relevant health units.

The HM/HC strategy assumes that the GOE will support a limited policy of administrative and financial decentralization. Decentralization can be perceived as a political hazard by a central government. A period of increased economic and political insecurity could weaken the GOE's commitment to a decentralized approach.

Introducing sustainable fee-for-service systems that can provide useful returns to the district and governorate will require policy reform. At present, fees are paid in all private for profit and not-for-profit health units and in most public units. The central MOH and the governorates must have confidence in the lower levels of the health care system and agree to relinquish to them authorities to increase fees and to retain greater proportion of these resources. Equally important, the health care offered must be of a quality to retain patients or increase client utilization, and safety mechanisms must be introduced to ensure that even clients without resources continue to receive essential health care services.

The MOH is presently reviewing its cost-recovery policy in health institutions. The project assumes that Governors will soon be granted greater latitude to set appropriate fees and to change allocations, and that Governors, in turn, will change policies to allow districts to retain more earned income. All governorates now have fee policies. The project will need to work with each Governor to establish a fee structure for the HM/HC districts that will permit incentives to the staff and permit at least some partial cost-recovery for the facilities and the district. Again, this will also require attention to the consequences of fee increases for the poorest of the poor. Yet it will be necessary if some degree of sustainability is to be achieved before USAID support ends.

Successful project implementation will require the political will from the MOH, Governors and district leaders. This, in turn will requires that all agents feel a sense of project ownership and agree about the validity of project objectives. These are intangibles that are impossible to guarantee.

The project design assumes that districts, with intensive technical assistance and the incentive of donor support, will be willing and able to form a health committee, mobilize the community, do a needs assessment and prepare a plan within nine months. Likewise, it assumes that the selected governorates will cooperate with planning and policy reform. It is possible, however, that some districts or even governorates will fail to cooperate and may need to be abandoned. The Project Steering Committee should set criteria by which a district or governorate will be dropped from the project for failure to meet objectives.

The design of this project assumes that decentralization and community mobilization at the governorate and district levels will lead to a more participatory decision-making process and to decisions that are more responsive to the health needs of the community. It is also possible, however, for local officials or communities to be less public spirited than central officials. This has occurred in cases of decentralization in other countries, where local officials simply pocketed the resources made available to the community. In other cases, local leaders may divert the resources to objectives they consider more important. The project steering committee may also need to develop strategies for managing detrimental political forces.

Oversight of project activities depends upon a good information system, and the HM/HC system will be established upon the reformed MOH HIS. If, at the beginning of the project's third year, the MOH has not yet instituted its new reporting system and there are no signs that it will occur during the next six months, the project will have to institute an alternative reporting system.

The family planning program currently collects fees for contraceptives. These sums are then redistributed as productivity payments to the personnel who provide family planning services. The HM/HC project aims to increase referrals of patients between the family planning staff and the health staff. The project should encourage negotiations between the MOH and the National Population Council on a system that would allow more equitable allocations of these fees once the referral system is in place. If the health and family planning staffs continue to function independently and under different

incentive and funding systems, even while they work side by side in the same units, the project will not achieve its objective of integrated services.

Because the bottom up approach will inevitably progress more slowly and encounter more complications than top down approaches, the projects' current plan for geographic coverage may have to be scaled back. The highest priority should be to carry out the strategy effectively, assuring that high quality health services are available, that communities participate in health planning, and that the results can be sustained after project assistance ends, and not simply to achieve widespread coverage. Efforts to move the process forward too quickly or too comprehensively will only dissipate resources and reduce impact.

#### B. CUT-OFF POINTS

This project could well have both major and minor cut-off points. A major cut-off point would occur if the MOH refused to permit decentralized decision-making by the Governors and districts. In such an event, the HM/HC district strategy would have to be reconsidered.

Minor cut-off points would be triggered by recalcitrant governorates or districts. Lack of progress on the central MOH information system development after two years, would constitute reason to stop supporting that activity and to plan a project-driven monitoring system. Other minor cut-off point would be the lack of qualified appropriate HM/HC staffing by the MOH or the MOI.

#### V. FINANCIAL PLAN

# **B.** OBLIGATION INFORMATION

The prime technical assistance contract will be a direct USAID contract. The PVO umbrella will also be a direct USAID obligation instrument, but may be a contract, cooperative agreement or grant. UNICEF will be supported by a direct USAID grant, and Wellstart through a Cooperative Agreement with USAID/Cairo. The FETP will be supported through a PASA. The large procurements of U.S. commodities will be contracted directly by USAID/Cairo's Procurement Directorate.

USAID will make every effort to identify procurement opportunities for Gray amendment companies and historically black colleges and universities. The request for proposals for the prime contract will indicate a preference for bids including disadvantaged businesses within the consortia.

## **Proposed Methods of Implementation & Financing**

<u>Activity</u>	Implementing <u>Methods</u>	Financing <u>Methods</u>
Technical Assistance	USAID Direct Contract/ Grant	Direct Pay
Commodities	USAID Direct Procurement (PIO/C)	Direct Pay
Training	PIO/P	Direct Pay
Other Grants	USAID Direct	Direct Pay
Local Support	PIL	Direct Reimbursement
Audits and Evaluation	USAID Direct	Direct Pay

## C. RECURRENT COSTS

While it is inevitable that the project will create new or improved activities in the health sector that will impose recurrent costs on the Government of Egypt, project designers believe that these will all be manageable costs.

The staff appointed by both the MOH and the MOI will be existing employees, and they will be paid salary supplements as compensation for the additional responsibilities they must assume during the life of the project. When the project ends, the surplus workload is presumed to end or to be sufficiently routinized to be manageable within the normal workday.

District level activities will also use existing institutions and personnel. Their objective is to improve the quality and completeness of essential health services the public sector is already expected to provide. To the extent that they expand the services provided, they are likely to increase the cost of providing them. Although the technical assistants will strive to help districts and governorates develop policies and rational fee structures that will enhance the sustainability of these health services, as well as to mobilize community resources to be invested in the enterprise, the disadvantaged regions targetted by the project will undoubtedly continue to require central government financial support. While it is certainly desirable for the government to increase its investment in primary health care in these regions, it is not a specific requirement of this project. However, the activities of the Cost Recovery for Health

Project and the planned Health Policy Support Project should contribute to this end, by reducing government expenditures on curative health care.

The National Breastfeeding Education Center will be built into an existing institution, most likely a university hospital. The plan is to develop it into training center that would become self-sustaining by marketing its programs to other countries in the Middle East region.

The Field Epidemiological Training Program will have to be supported by the MOH once USAID assistance ends. The ongoing costs of the program will be modest, but planning the future MOH budget allocation will be one of the benchmarks for institutionalization of the program.

#### D. MANAGEMENT COSTS

#### VI. MANAGEMENT SYSTEMS AND PROCEDURES

Conditional upon favorable financial assessments, the MOH will be responsible for managing the seed money that will be provided to districts in support of their plans. The PVO umbrella will be responsible for tracking the grants awarded to ENGOs.

The proposed use of the Host Country implementation mechanism through Project Implementation Letters (PILs) for the support of local activities constitutes a departure from USAID's preference for direct USAID contracting mechanisms. However, given the cultural and social characteristics of the population and the remoteness of many of the regions targeted by the project, it will be difficult for USAID and its agents to reach beneficiaries without the active participation of MOH central and district level employees. The reliance on the Host Country method of implementation for selected project activities is therefore critical to the effectiveness of other direct methods proposed for the project.

In compliance with Mission Order 19-14, prior to the commitment of USAID funds to any Host Country implementing agency, all necessary assessments, financial reviews, pre-awards, etc., will be completed and will provide the basis for funding decisions. Periodical audits and financial reviews of expenditures will also be conducted during the life of the project.

Prior to commitment of USG funds for local support, the Office of Financial Management will be notified by the Health Office and will arrange for a review of the financial management, procurement capability and internal control systems of each recipient entity. For recipients with previous experience implementing USAID projects, updated assessments must be in place and satisfactory. Satisfactory assessments that are more than one year old must also be updated, as must assessments dating back less than twelve months but which identified material irregularities.

The GOE will maintain adequate accounting books and records to document its contributions to the project, and provide USAID with semi-annual reports on these contributions. The various details regarding accounting, reporting, methods of verification and responsible counterparts will be communicated with the GOE through Project Implementation Letters (PIL's) promptly after signature of the Project Agreement and prior to commitment of USG funds for the project.

During the life of this project, two non-federal audits will be performed to determine whether all recipients have properly accounted for USAID funds and used them for the purposes intended and in accordance with applicable laws and regulations. USAID will ensure that all commitments over \$100,000 under this project are in the Mission's "audit universe," and will schedule and ensure funds for audits of those commitments in accordance with USAID/Washington guidance dated 3/31/92 on Audit Management and Resolution Program.

The Regional Inspector General for Audit (RIG/A) will perform quality and compliance reviews of the non-federal recipient audits performed under this project, and will provide or arrange for additional audit coverage requested by USAID, if deemed necessary.